Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of:)	
Number Resource Optimization)	CC Docket No. 99-200
Implementation of the Local)	CC Docket No. 96-98
Competition Provisions of the)	
Telecommunications Act of 1996)	

COMMENTS OF THE CALIFORNIA CABLE & TELECOMMUNICATIONS ASSOCIATION IN OPPOSITION TO CALIFORNIA PETITION FOR AUTHORITY TO IMPLEMENT SPECIALIZED OVERLAY AREA CODES

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The California Cable & Telecommunications Association ("CCTA")¹ submits these comments in response to the October 6, 2003 petition filed by the California Public Utilities Commission ("CPUC") and the People of the State of California ("Petitioners") for authority to implement two specialized overlay area codes ("SOs") to cover the entire state of California.

than 1,350 communities, providing service to over 7.1 million California homes.

The CCTA, an industry association of California cable service providers, is the largest state cable telecommunications association in the country. Its members include more than 250 cable television systems serving more

I.

Summary

Petitioners propose to supplement the lives of California's twenty-five area codes by populating the new overlays with numbers associated with Voice over Internet Protocol ("VoIP") and certain other services. In addition, Petitioners propose to place all "transparent" or "non-geographic based" numbers, excluding numbers associated with cellular telephone services, in the new Numbering Plan Areas ("NPAs").²

CCTA opposes Petitioners' plan to predicate California's area code relief planning and policy upon Internet Protocol ("IP") technologies and services whose current and future impact on area codes has yet to be quantified. VoIP services, in particular, are fast appearing, but they are still nascent. Imposing unique area codes upon those services at this early stage has the potential to thwart innovation and to pigeon-hole those offerings into unknown and undesirable codes. The Federal Communications Commission ("FCC" or "Commission") must not permit states to implement area code relief policies based on VoIP services until such time as the Commission has completed a meaningful and sufficiently comprehensive investigation of VoIP, with input from current and potential service providers.

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See Petition of the California Public Utilities Commission and of the People of the State of California for Authority to Implement Specialized Overlay Area Codes, FCC CC Dkt. 99-200 at 2 (Oct. 6, 2003) ("Petition").

SOs populated with VoIP services are not only premature from a national and state policy perspective, but they are also unworkable and unwarranted as viable area code relief measures. Petitioners have not demonstrated that benefits will flow from the proposed SOs. Moreover, an analysis of the FCC's criteria for SOs reveals that the disadvantages of Petitioners' plan are severe and numerous, as further discussed below.

II. Assessment of Whether Petitioners Sufficiently Address the FCC's SO Criteria

The FCC's Public Notice asks commenting parities to specifically address whether Petitioners' plan meets the criteria set forth by the FCC for allowing state commissions to seek authority to implement SOs on a case-by-case basis.³ As described below, Petitioners' plan to populate area codes with VoIP services is inconsistent with the FCC's recommended criteria.

Area Covered By SO (¶ 80)

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The Commission limits any grant of authority to implement SOs to areas where area code relief is needed noting that "[t]he effect of allowing SOs to be implemented in areas that are not nearing exhaust could be staggering, because of the potential for multiple requests for area codes over a short period of time."

California For Authority to Implement Specialized Overlay Area Codes, Public Notice, FCC CC Dkt. No. 99-11 (Oct. 16, 2003).

See Wireline Competition Bureau Seeks Comment on the Petition of the California Public Utilities Commission and of the People of the State of

See *Numbering Resource Optimization*, Third R&O and Second Order on Reconsideration, FCC CC Dkt. Nos. 96-98 and 99-200, 17 FCC Rcd 252, 282-294, ¶ 80 (2001) ("Third Report and Order").

Petitioners' plan to cover the entire state of California (twenty-five area codes) with two SOs fails to meet the FCC's baseline requirements above.

Industry NPA Code Relief Planning and Notification Guidelines specify that an area code is nearing exhaustion when it is projected to exhaust within thirty-six months.⁵ By that standard, only three of California's twenty-five area codes are nearing exhaustion⁶ and therefore qualify for area code relief. Moreover, over one-half of California's twenty-five area codes are forecast to last until the year 2010 or beyond.⁷ The proposed SOs, by including all area codes in California regardless of projected life, would subject the vast majority of California's businesses and families unnecessarily to new area codes for VoIP services, when only three of those twenty-five area codes are considered to be exhausted. As described below, of those three codes, only a single area code is an SO candidate under the Commission's criteria.

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See NPA Code Relief Planning & Notification Guidelines, INC 97-0404-016, at: www.atis.org/pub/clc/nc/npa/npa-relief-guidelines-final-document-10-03-03. (Oct. 3, 2003). Section 5.0 NPA Relief Planning Process states that "NANPA shall prepare relief options for each NPA projected to exhaust within thirty-six months."

The 310 NPA is projected to exhaust 4Q03; 714 NPA is projected to exhaust 1Q06; and the 909 NPA is projected to exhaust in 4Q03. The remaining 22 California area codes are projected to exhaust during or beyond 4Q06. See NRUF and NPA Exhaust Analysis, North American Numbering Plan Administration ("NANPA"), Jun. 2, 2003, at 7. http://www.nanpa.com/pdf/NRUF/2003_NPA_Exhaust_Projections_rev2.pdf

⁷ *Id*. at 7.

When to Implement and Transition SOs (¶ 85)

The FCC's criteria also provide that to optimize value SOs should not be implemented where area code exhaust will occur in less than a year. 8

Petitioners' plan also fails to meet the FCC's criterion summarized above. Indeed, Petitioners expressly rely on their proposed SOs as means of postponing immediate area code relief in the 310 NPA. As the CPUC stated last month⁹:

[T]he Commission filed on October 7, 2003 a petition for FCC authorization to implement a technology-specific overlay. We believe this option should be more fully explored as a means of prolonging the life of the 310 are [sic] code before taking action to impose a split or overlay on its businesses and families. ¹⁰

The Petitioners' reliance on the SOs is inconsistent with the FCC's continued admonishments that states must impose area code relief when necessary.

In sum, when the two FCC criteria described above are applied to Petitioners' proposed plan, it is apparent that twenty-four of California's twenty-five area codes are not candidates for an SO. Indeed, only one area code, the 714 NPA, meets the FCC's criteria for the appropriate timing of an SO. CCTA submits that Petitioners have provided insufficient justification to implement two new SOs to cover the entire state of California for the benefit of one area code.

9 CPUC Decision 03-10-060, mimeo at 1 (Oct. 16, 2003).

Third Report & Order ¶ 80

Supra at 20. See also CPUC Conclusion of Law 6 at 25.

Technologies and Services (¶ 82)

The FCC explains that for an SO to provide any meaningful benefits it should divert significant demand from the underlying area code to extend the life of that area code. Moreover, The FCC will "specifically favor [SOs] that would include and retain non-geographic based services." ¹¹

Effect on Demand

Petitioners provide little or no information about how the SOs will divert demand from the underlying area code. As previously discussed, Petitioners propose to place several different types of services and technologies in the SOs, including paging services; services such as On-Star; E-fax services; automatic teller machines; point-of-sale registers; as well as modems or fax machines at businesses with fifty or more access lines by a single provider. VoIP services and dial-up Internet access services are also included in the SOs. ¹² However, Petitioners provide little or no information about the demand related to those various services or technologies. Instead, Petitioners ask for "some leeway" in resolving those questions, stating that, "at this time, the industry can neither estimate the current level nor the future demand of numbers used for these services."¹³

CCTA recognizes that Petitioners face a quandary in their attempt to demonstrate the benefits of the proposed SOs. Nevertheless, the Commission's

Third Report and Order ¶ 82

Petition at 3.

¹³ *Id.*

question as to whether the proposed SOs will divert significant demand from the underlying area codes is a fundamental one. A proposal that cannot even begin to address the question of demand is not a proven or viable area code relief solution.

<u>Preference for Non-Geographic Based Services</u>

The FCC criteria outlined above show a strong preference on the part of the Commission for SOs populated by non-geographic based services.

Petitioners claim their proposal places all "transparent" or "non-geographic based" numbers, except for cellular telephone services, into the SOs. 14

Notwithstanding Petitioners' assertion, CCTA believes the proposed SOs undercut the FCC's preference for non-geographic services in at least two significant ways.

First, Petitioners have concluded that all VoIP services are nongeographic.¹⁵ Petitioners have not substantiated that conclusion, however. VoIP
services can vary in terms of whether they are geographic or non-geographic.

Some providers are developing services that are location-based and restricted to
a specific area (*e.g.*, a cable system's franchised community), while other
providers are developing services that are not location-based or restricted to a
specific area (*i.e.*, non-geographic).

Even assuming for argument's sake that all VoIP services are nongeographic, it is unclear that an SO in which VoIP services will be segregated,

Petition at 2 and 5.

Petition at 2.

will be effective in providing numbering relief. For example, non-geographic based numbers may be location agnostic. "Location agnostic" mean that a customer in New York could secure a California number. Similarly, a customer in California could move to a location outside of that state and take his or her number to the new location. However, despite the fact that some VoIP-based services may allow a customer to move its number in or out of a given area or a given state, there is, at this early stage in the evolution of VoIP, a paucity of evidence indicating that migration of numbers between states or areas will have a net positive or net negative impact on number inventories in any given state.

Second, Petitioners do not explain why cellular telephone services are excluded from their proposal. Cellular telephone services are among the most prevalent non-geographic-based services nationwide and could divert significant demand from underlying area codes in California. The fact that Petitioners omitted cellular telephone services from their plan is particularly surprising in light of Californians' clear preference for such a scheme. As Petitioners have previously noted in their comments to an FCC *Further Notice of Proposed Rulemaking*¹⁶:

We repeat also that in California, we have encountered *tremendous* public support for the concept of a separate area code fore wireless service. Indeed, many members of the public who offer this proposal in public meetings are themselves wireless customers who

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Further Comments of the California Public Utilities Commission and of the People of the State of California dated February 14, 2000 in response the Further Notice of Proposed Rulemaking issues by the FCC, FCC 00-249 (Dec. 29, 2000).

assert emphatically that their identification with their wireless number is less important than their identification with their wireline number. (Emphasis in original.)

The Petitioners' current plan provides no evidence to suggest that the public sentiment described above has changed.

Moreover, on September 25, 2002, Petitioners filed with the FCC a petition for authority to implement SOs covering the 310 and 909 NPAs. Those SOs would have been populated, in part, by cellular telephone services. Unlike the current petition, which offers little or no evidence of the benefit of the proposed SO, the September 25, 2002 petition detailed how the proposed SO would extend the life of the underlying area code by at least five years.¹⁷

Petitioners subsequently withdrew their wireless-based SO petition that, as noted above, would have at least afforded Californians the benefits of a non-geographic based service SO and which would have prolonged the life of an underlying area code. Now, Petitioners seek to replace their wireless-based SO petition with a petition which relies in part on segregating VoIP services — services that currently have no clear definition and where the effect on area code lives remain nebulous. Given the "tremendous" support among Californians for wireless-based SOs, the Petitioners will be hard-pressed to justify substitution of an SO based on wireless services with an SO based on VoIP services.

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See Petition of the California Public Utilities Commission and of the People of the State of the [sic] California for Authority to Implement Technology-Specific Overlay Area Codes and Request for Expedited Treatment, at 5 (Sept. 25, 2002).

Geographic Area (¶ 83)

The FCC finds that SOs that cover more than one area code are superior from a numbering resource optimization perspective because they would reduce the demand for numbers in multiple area codes. The FCC also believes that SOs that include non-geographic based services may be ideal, from a number resource otpimaztion perspectives. Finally, the FCC requires that petitions for SOs specify how rating and routing of calls placed between underlying area codes in the SO NPA will be addressed.¹⁸

Multiple Area Codes

Consistent with the FCC's preference, the proposed SOs would cover all of California's twenty-five area codes. However, as previously described, the SOs would not include cellular telephone services — the most obvious non-geographic-based services — but would instead include VoIP-based services which, depending upon how they are provided, could well be geographically based.

Rating and Routing of Calls

In response to the FCC's criterion regarding rate centers, Petitioners merely state that all rate centers will be "matched," but they do not otherwise specify how rating and routing issues will be addressed. Many geographic- and non-geographic-based services will require either an NXX code or a one thousand number block in numerous rate centers. The CPUC does not explain whether or how the proposed two new area codes will furnish enough numbers to provide myriad providers with sufficient resources to match the underlying 738 rate

Third Report and Order ¶ 83

centers in California. For example, paging services will still require a full NXX code for each rate center in which they do business. Depending on how many paging companies operate in California and their respective rate center requirements, paging services alone could consume the resources provided by the two new area codes.¹⁹

Transitional SOs (¶ 84)

The FCC favors SOs that transition into all service overlays. The FCC only favors permanent SOs for non-geographic based services.²⁰

Petitioners seek a *permanent* SO that excludes cellular telephone services. As noted above, Petitioners presume erroneously that all VoIP services are non-geographic-based services. Petitioners' proposal for a permanent SO that covers geographic-based services (and not merely non-geographic-based services) is inconsistent with the FCC's preference cited above.

Take-Backs (¶ 88)

While not imposing a "blanket prohibition" against telephone number "take-backs," the FCC acknowledges that telephone number "take-backs" have significant drawbacks and costs. The FCC added that consumers who are required to relinquish their telephone numbers should support such a measure.²¹

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Petitioners recognize that the paging exclusion from LNP will require further investigation to evaluate the relative benefits of assigning paging companies to the SOs. Petition at 3.

Third Report and Order ¶ 84

Third Report and Order ¶ 88

Technical and Cost Concerns

The CPUC seeks to "take back" numbers from carriers/customers that are used for devices or services intended for the new area code. Petitioners further seek the authority to take back numbers on a retroactive basis. Petitioners note that take-backs pose a number of technical challenges in identifying, and reprogramming numbers. Those challenges, Petitioners have learned, may be very costly.²²

Competitive Concerns

In addition to the technical concerns described by Petitioners, CCTA is concerned about potential anti-competitive effects of imposing take-back requirements on those providers deemed VoIP service providers. Today, many providers furnish voice services that are increasingly interwoven with VoIP technologies. Many calls made today utilize IP networks, even if they originate and terminate on the public switched telephone network ("PSTN"). If Petitioners are allowed to take back numbers from providers based only on the underlying technology used for all or a portion of a provider's network, then it is possible that customers will be subject to disparate and even arbitrary treatment. For example, assume there are two residential customers in the same neighborhood with functionally equivalent or similar communications services. One of those neighbors would be required to relinquish his or her telephone number and

Petition at 6.

accept the new, potentially less desirable, area code with consequent mandatory ten-digit dialing for most calls, if the underlying network of otherwise identical service is determined to fall into the VoIP category for area code relief purposes. In contrast, the neighbor with functionally similar or equivalent service provided over a traditional circuit-switched network would be permitted to retain his or her number and would continue to enjoy seven-digit dialing for most calls. CCTA submits that this arbitrary result would cause regulatory and industry confusion and ultimately penalize new providers who use advanced technologies. That result would run precisely counter to federal and state policies promoting broadband use, demand, and technology. Moreover, it is unclear what criteria, if any, Petitioners propose to use to determinate whether a provider is furnishing a VoIP service or a non-VoIP service. And it is unlikely that Petitioners will have those criteria resolved any time soon, while the regulatory status of VoIP services remains in flux at the federal and state levels.

Ten-Digit Dialing (¶ 91)

The FCC favors transitional SO proposals that include ten-digit dialing. The FCC concludes that ten-digit dialing minimizes anticompetitive effects due to dialing disparities, which in turn, avoids customer confusion.²³

Petitioners request permanent SOs and seek to retain seven-digit dialing in the underlying NPAs. Petitioners "do not believe ten-digit dialing would be necessary in the SOs because the competitive concerns, which prompted the Commission to adopt the ten-digit dialing requirement in 1996, have largely been

abated over time."²⁴ Moreover, Petitioners assert that California state law requires them to seek authority to permit seven-digit dialing within that technology-specific area code and the underlying preexisting area code or codes.²⁵

Proposed SO Would Reintroduce Anti-Competitive Dialing Disparities

CCTA respectfully disagrees with Petitioners assertions regarding the status of competition in California and the proper interpretation of California state law. First, the ability to offer customers the option of retaining their current telephone number through local number portability ("LNP") remains a critical competitive tool. Providing customers with the same area code as provided by the incumbent local exchange carrier likewise remains critical to those companies seeking to compete in California.

Petitioners' proposal would deny those competitive safeguards to providers who plan to use VoIP technology in the provision of services.

Consumers who obtain service from a provider whose offering is furnished over VoIP would be forced to dial ten digits for most of their local calls, while consumers who obtain similar service from a non-VoIP based provider would continue to dial seven digits for most local calls. That is precisely the anti-

Third Report and Order ¶ 88

Petition at 7.

²⁵ *Id.*

competitive outcome the FCC feared when SOs were first proposed, and it is the reason why the FCC initially prohibited SOs.²⁶

Proposed SO Would Erase Value of Number Portability

Petitioners proposal would also effectively eliminate the competitive protection afforded by number portability. An SO to which VoIP services are relegated would prevent a customer from porting from one service provider to another provider if one of those provider's platforms uses VoIP technology, because the VoIP platform would be restricted to SO area codes. Likewise, a customer who wishes to port from a non-VoIP service to a VoIP service — or from a wireless service to a VoIP-based service — would be prohibited from doing so. Such an outcome would undermine the very purpose of number portability by denying customers the ability to choose among competing service offerings without having to sacrifice their preexisting assigned phone number.

Petitioners attempt to address the concerns about number portability outlined above by pointing to the fact that some competitive providers have acquired amassed many numbers in recent years.²⁷ CCTA concedes that some competitive carriers have acquired significant numbering resources over the past several years. However, those numbering resources will prove worthless to those providers who would be prohibited from using them with VoIP platformbased offerings under Petitioners' proposal.

See Second Report and Order and Memorandum Opinion and Order, FCC Dkt. Nos. 96-333 and 96-98, at ¶ 92 (rel. Aug. 8, 1996).

Petitioners claim that California Public Utilities Code Section 7943(b) compels them to request permanent seven-digit dialing. CCTA believes that the statute upon which Petitioners rely must be considered in its entirety. While the statute does mandate that petitioners seek authority to implement seven-digit dialing, the statute also mandates that the CPUC request from the FCC authority to establish an area code "dedicated to wireless and data usage." The California Legislature thus viewed wireless technology and data as appropriate candidates for a distinct area code, and presumably, the appropriate candidates for seven-digit dialing. The statute does not substantiate Petitioners' assumption that the California Legislature intended to impose seven-digit dialing requirements in non-wireless service SOs nor does the Statute substantiate the assumption that the California Legislature intended "data" to include VoIP services.

Moreover, the same California statute mandates that number portability not be affected by technology-specific overlay plans. ²⁸ As described above, the retention of seven-digit dialing, combined with restricting VoIP services to their own area code, renders number portability unavailable to VoIP service providers that seek to port numbers from competitors. While VoIP service providers –

Petition at 9.

²⁸ "The commission may not implement any authority granted by the Federal Communications Commission pursuant to subdivision (b), in a manner

along with fax machines, pagers and data-based services – would be relegated to the new overlay and would presumably be able to port to other carriers in that area code, such porting opportunities would obviously be restricted, thereby limiting competition.

Rationing (¶ 93)

The FCC says SOs should not be subject to rationing.²⁹

Petitioners propose that the rules for existing NPAs in California, including lottery rules, apply to the SOs. CCTA recognizes that rationing may in some cases be necessary to ensure that numbering resources do not exhaust before area code relief can be implemented to ensure that all providers have a fair opportunity to obtain numbering resources when an area code is in jeopardy. CCTA assumes that Petitioners propose that lottery rules — *not the lottery*-remain in place and apply to SOs. If the petition is granted, the Commission should reiterate that code rationing should not be used as a substitute for area code relief in order to artificially extend the life of the NPAs. ³⁰

Thousands-Block Number Pooling (¶ 94)

The FCC states that it will look favorably upon petitions that pursue other numbering optimization measures such as rate center consolation and unassigned number porting.³¹

that impairs the ability of a customer to have number portability." California Public Utilities Code Section 7943(e)

- Third Report and Order ¶ 93
- California Delegation Order, FCC 99-248, ¶ 39.
- Third Report and Order ¶ 93

Petitioners propose to establish number pools in the SOs immediately upon implementation. No other number optimization measures are pursued in the petition.

III.

California's Area Code Relief Policy Should Not Be Built Upon a Nascent and Undefined Technology

Beyond the specific concerns described above, CCTA has a more general concern regarding the use of VoIP services as the foundation for California's area code relief planning proposals. Many of CCTA's members are engaged in various VoIP technology tests and trials and intend to provide facilities-based VoIP services in California in the near future. The Commission should avoid the temptation to brand these applications and services prematurely with a unique area code.

It is unclear from Petitioners' plan as to what VoIP services will be included in the SOs. VoIP is not a single idea, capability, or service. To the contrary, VoIP is any number of features, capabilities, and services that take advantage of the development of technologies that transmit voice communications using Internet Protocol ("IP"). Some VoIP features or services will use private IP networks, others will use the public Internet, others will use a combination of private IP networks and the Internet, and still others will use a combination of IP networks and circuit-switched networks.

Many companies are contemplating, testing, and/or deploying various VoIP-based services. Today, for example, some providers are deploying VoIP technologies to originate and terminate communications exclusively over international routes, while other providers are deploying VoIP technologies to originate and terminate communications over local, regional, and national routes. Some VoIP technologies make no use of traditional numbering resources (*e.g.*, computer-to-computer VoIP applications that involve "click to talk" such as those offered by Pulver.com). Other VoIP technologies use ten-digit telephone numbers (e.g., CPE-to-CPE VoIP applications).

However, while some VoIP services use number resources, it is far from established that such uses will increase the demand for numbering resources in any appreciable way in California in the near term. After all, virtually all VoIP services, unlike established services such as cellular telephone services, have reached negligible penetration levels, and there is little or no reliable data concerning the impact of those services on numbering resources. More importantly, some VoIP services that require numbering resources — to the extent that they are not relegated to VoIP-specific codes or unconventional dialing protocols — may currently or in the future permit porting of *existing* numbers from other providers, thereby mitigating the demand for *new* numbers.

Since VoIP based technology and services are in their infancy, one cannot predict credibly the future numbering demands they may eventually create.

CCTA urges the Commission to consider regulatory impacts that might

predetermine VoIP-based services' potential demand for traditional numbering resources, particularly since that predetermination, were it to be in the form of the contemplated SOs specific to VoIP, could have the unintended consequence of making state-of-the-art and innovative VoIP services less attractive to customers than non-VoIP services using more desirable existing NPA-NXXs. This regulatory impact may well affect the development of broadband technology in California by diminishing the attractiveness of new broadband service applications.

IV. Conclusion

Petitioners propose an area code relief plan that articulates no benefit to the lives of underlying area codes and that is largely antithetical to the criteria set forth in the Commission's Third Report and Order. For the reasons discussed above, the Commission to deny the petition and defer any specific number resource considerations related to VoIP services until a national policy is developed, and the ramifications of regulating these services are fully understood.

Respectfully submitted,

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